Approved Minutes of the Technical Advisory Committee Meeting
March 18, 2008

Members present:	Roger Thompson	Alan Huizenga
	Gail Center	Rodney Pingree
	Craig Heindel	Allison Lowry
	Kim Greenwood	John Forcier
Others present:	Claude Chevalier	George Mills
	Scott Stewart	

Scheduled meetings:

April 15, 2008	1-4 PM	Lincoln Room, Osgood Building
May 20, 2008	1-4 PM	Chapel Conference Room
June 17, 2008	1-4 PM	Room 100 Stanley Hall

Review of minutes

The minutes of the February 19, 2008 meeting were reviewed. Gail asked that minutes reflect her hope that DEC would develop the mapping for areas with water problems. Craig suggested that "endorsed" should be dropped from page one of the minutes. George suggested that the discussion about the use of 1350 GPD as a break point should be included.

Legislative update

Roger noted there was proposed language that would require a report on the use of the general permit approach in the regional office program. This really is related to the targeted review concept that was developed after the Kaizen process. It would have limited the number of pre-application site and post application site visits and the number of plan reviews. Kim agreed that this was what the legislative committee was concerned about. So far, there has been little implementation of the plans except for administrative issuance of municipal connections. The regional offices are continuing pretty much as in the past and are making as many site visits and reviewing as many plans as they can while making sure the permit processing times are meeting the standards. The regional offices, particularly Essex and Rutland, have improved their processing times.

Kim noted that the public trust concept for groundwater remains in play at the legislature with the Senate NR Resources Committee approving a bill that contains public trust language. Scott noted that legislation under consideration conflicts with the definition of public water supplies as used in the current Water Supply Rule.

Meeting Schedule

Future meetings were scheduled for April 15, May 20, and June 17. Scott asked about having extra meetings so there would be time to work on revisions to the Water Supply Rule. The group did not want to schedule extra meetings at this time but might at a later time.

Water Treatment Issues

Rodney asked if there is a current policy related to the treatment of radionuclides for new wells. Roger said that the current policy, which dates back to around 2000, is that new wells will not be approved for use if treatment for radionuclides is required. This is because of the disposal problem of the filter backwash for the most common method of treatment for radionuclides.

The disposal of radionuclides is a UIC (Underground Injection Control) issue. Federal regulation applies and EPA does not have a clear position on how to apply this. Other states have unclear policies as well. Canute Dalmasse signed guidance around 2000 that allowed for treatment of existing wells with disposal through the existing leachfields.

Alan asked if the backwash could be returned to the source well. It would probably require a separate well drilled into the same aquifer because the concentrated backwash would not disperse easily in the bedrock aquifer. Roger said he would be OK with the concept as the existing radionuclides are only being returned to their source but EPA has not indicated this would meet the UIC Rules.

For perspective, Gail reviewed the results of water tests of private water systems for radionuclides done by the Vermont Department of Health Laboratory. Out of over 2000 samples, 40+ had levels above the standards with some up to 200 picocuries. It was noted that Public Water Supplies continue to provide water while the system is brought into compliance.

Gail also noted that about 25% of water samples from private water systems are positive for coliform with about 3% positive for e-coli. Out of 2157 samples 3.4% are above the arsenic standard with a range of 11-151 ppb. 6.4% of samples tested above the limit for radium with a range of 6.9 to 69 picocuries.

John asked if anyone had second thoughts about their positions at the last meeting after reading the e-mails from Bruce Douglas. Bruce stated that he would be concerned about deregulating installation of water treatment systems for pathogens and primary standards for both systems serving only one SFR and for other systems up to the Public Water System level. George noted that simply having a positive reading for coliform did not mean that pathogens are present. Rodney noted that treatment for cryptosporidium and giardia with chlorine is ineffective and that UV lights are only effective with there is

a low level of turbidity in the water being treated. Claude said he still did not see a problem that justified a requirement that only PE design water treatment systems.

Alan noted that he supported Bruce's statement that the water system should be evaluated prior to just installing a water treatment system. This would ensure that other problems were resolved and that the treatment system was appropriate for that particular water system. Gail noted that that when describing treatment for pathogens the word should be inactivate not remove.

John asked Alan if he would support deregulation of water treatment systems for pathogens. Alan indicated he would accept deregulation at the one SFR level but not for other systems. Rodney recommended against deregulation for any systems treating pathogens. John stated that while he did not object to deregulation of treatment systems for pathogens at the previous meeting, after reading Bruce's recommendations he does not support deregulation of any treatment systems for pathogens. Kim stated that she would support deregulation of treatment systems for secondary standards she would not support deregulation of any treatment systems for pathogens.

Alan noted that he supports doing a full water test at the time of sale. The test that New Jersey currently requires costs $316.

The group then turned to the water treatment for primary standards. The common contaminants found in Vermont include lead and copper, arsenic, hydrocarbons, and fluoride. There is a large list of primary contaminants but most are rarely or never found in Vermont as they are not naturally occurring. Claude said that it might be appropriate for a person designing water treatment for primary standards to have a WQA (Water Quality Association) certification. Kim asked Claude if his well drilling company was typical of all well drilling companies when it comes to designing water treatment systems. Claude noted that the level of skill and interest varied with the larger firms more apt to be involved in additional tasks such as installation the service to the house, the pressure tanks and pump controls, and water treatment systems.

On the question of whether water treatment systems for primary contaminants that serve only one SFR should be deregulated, TAC voted 6 no and 3 yes.

On the question of whether water treatment systems for primary contaminants that serve only other water systems up to the Public Water System level should be deregulated, TAC voted 6 no and 3 yes.

Permit by Rule

Roger asked if TAC members would support a permit by rule approach. A permit by Rule approach, which might be implemented in the Rules as a conditional exemption, could include a process that regulated the design and/or installation of water treatment systems while not requiring issuance of a permit. This would reduce the cost and the time required to get a system installed. The permit by rule could specify who could do

the designs and whether the equipment needs to be certified by NSF (National Sanitation Foundation) or some other organization. The permit by Rule could have different requirements for SFR only or for pathogen treatment system versus systems for primary standards. When polled the members agreed that a permit by rule approach should be evaluated. John noted that he would support permit by rule for some treatment systems but would need further evaluation to decide if there is a risk level sufficient to trigger the need for a professional engineer's input. John noted that a maintenance contract should be required.

Claude will be included in discussions about the permit by rule approach as a well driller representative. John noted that Mike Quaid is the current contact for the PE Board.

Items prioritized for discussion with high, low, and medium ranking

1. Soil identification vs. perc test **medium**
2. Curtain drain with presumption of effectiveness **high**
3. Revisions to desktop hydro chart **medium**
4. Minimum amount of sand under a mound **high**
5. Grandfathered design flow and conversion of use policy **high**
6. Updating of design flow chart **high**

Executive Committee

John Forcier, Steve Revell, Lance Phelps, Phil Dechert, and Roger Thompson
Alternates – Chris Thompson, Bernie Chenette, Spencer Harris, Jeff Williams

Subcommittees

Hydrogeology - Allison Lowry, Craig Heindel, Dave Cotton and Steve Revell.

Training subcommittee - John Forcier, Roger Thompson, Allison Lowry, Dave Cotton, and Barbara Willis.

Drip Disposal – Roger Thompson, Dave Cotton, Steve Revell, Alan Huizenga

Water treatment systems – Gail Center, Jeff Williams, Rodney Pingree, Dave Cotton, Lance Phelps, and Roger Thompson.